

**A Conceptual Design of an Insitu System for
Cryogenic Hohlraum Assembly**

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We present a conceptual design of a system which assembles the hohlraum for cryogenic NIF targets at the target chamber center after all target handling is complete. This approach has several advantages. It allows NIF targets to be filled and transported using technology very similar to that being developed for OMEGA direct drive targets by General Atomics. This may offer a substantial cost savings to the NIF project. An additional advantage is that layer augmentation schemes such as Joule heating and IR heating can be applied without limiting hohlraum design flexibility. Finally, development of techniques to characterize the cryogenic layer will be substantially simplified with multi-axis views of the target.

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